QEC

Expert in maintaining a wide range of biomedical equipment and patient beds

Preventative Maintenance Program

www.qualityenc.com.au

A newer system of healthcare

QEC offers biomedical equipment repair services that will be supportive for your patients, and flourish your business. We offer an inclusive repair and precautionary maintenance solution that will fit in your budget, along with keeping your equipment at patient-ready standards.

Our biomedical maintenance service ranges from repairing and servicing equipment of a single medical domain to equipment of the whole medical facility. With QEC you select the services that you think are right for your system.

Services We Offer

Exceptional Talent For Your Biomedical Services Precisely When You Need It

Equipment Repair & Maintenance

New Equipment Installation And Commissioning

Total Equipment Management

Electrical Safety Testing & Compliance Check

Oem Service Partnership

Recommended Equipment Service Cycle Guide

EQUIPMENT DESCRIPTION:	MAINTENANCE FREQUENCY:
Hospital Bed (electric)	Annually
Lifting Hoist (electric)	6-month
Lifting Hoist (ceiling)	6-month
Alternating Pressure Mattress	6-month
Shower Transport Commode	Annually
Commercial Trolley	Annually
Pressure/Positioning Chair	Annually
Wheelchair (manual)	Annually
Wheelchair (electric)	Annually
Wheelchair (tilt n space)	Annually
Shower Trolley (manual)	Annually
Shower Trolley (electric)	Annually
Walking Frame	Annually
Weigh Scales (not calibration)	Annually
Electrical Test & Tag (additional)	Annually
Sanitisers	6-month
Macerators	6-month

Maintenance of Hospital Bed

Checking Bed Operation Functions	Raising / Lowering
Checking Hand Controller Integrity	Function / Casing / Cable
Checking Castors	Movement / Brakes
Checking Frame Structure	Integrity / Condition
Checking Actuators	Movement / Noise
Electrical Test & Tag	Electrical Leads / Connections
Checking Mattress Structure	Integrity / Condition
Checking Bed Ends	Structural / Movement

Preventative Maintenance Equipment Report

Electrical Safety Check

Electrical Safety Check
PERFORMANCE VERIFICATION REPORT
AS3551:2012

Standard Job	Biomedical Equipment Electrical Safety Verification		
Manufacturer		**Service Date:**	
Model		**Asset Number**	
Serial No		**Department**	
Equipment			

General Condition of Equipment		Results
Self Test, Alarms Audible, Display Operational		
Keypads and Foot Switch Operation		
Wheels, Castors and Brakes are in working order		
Electrical Safety Test (AS3551)		
Equipment markings are legible		
Fuse ratings correct		
Equipment, Accessories Connectors, Plugs & Sockets undamaged and secured. Power cord approved type		
Protective Earth Test		
Class I equipment, resistance from mains plug to accessible earthed parts, fixed power supply cord <0.2 Ω or detachable power supply cord <0.3 Ω		
Class I & II equipment, detachable cord measured separately, the maximum resistance for the protective earthing conductor is <0.2 Ω		
Class I equipment, resistance beteween any protectively earthed accessible metal parts and the protective earth terminal of the equipment is <0.1 Ω		
Insulation Resistance Tests		**MΩ**
Mains parts to protective earth & mains to equipment enclosure >10MΩ		
Earth Leakage Current Test		**uA**
Class I equipment, 5,000uA max, no fault condition		
Class I equipment, 10,000uA max, neutral open or mains reversed		
Touch Test Current (Enclosure Current)		**µA**
Class I single-phase and multi-phase equipment, no fault condition, 100uA		
Class I single-phase equipment with a flexible supply cord, neutral open or earth open, 500uA max		
Applied Part Leakage Current		**µA**
CF equipment, 10uA max, normal condition		
CF equipment, 50uA max, earth open or neutral open		
BF & B equipment, 100uA max, normal condition		
BF & B equipment, 50uA max, earth open or neutral open		
Mains Contact Current		**uA**
CF equipment, 50uA max, per patient connection		
BF equipment, 5000uA max, all applied parts bridged together		

Preventative Maintenance Equipment Report

Vital Signs Monitor

Vital Signs Monitor
PERFORMANCE VERIFICATION REPORT
AS3551:2012

End User		**Department**	
Manufacturer		**Model**	
Aux ID		**Serial No**	

General (all tests to be done on battery)		**Results**
Condition of Equipment		
Self-Test		
General Condition of Accessories		
High Spo2 Alarm		
Low Spo2 Alarm		
Probe off		
NIBP Accuracy to manufacturer specifications or +/- 2mmHg OR		
NIBP Accuracy with Sim Cube 120/80		
Temperature Probe Condition and Function Check		
Battery Functional (replace every two years if lead acid)		
Electrical Safety Test (AS3551)		
Equipment markings are legible		
Fuse ratings correct		
Equipment, Accessories Connectors, Plugs & Sockets undamaged and secured. Power cord approved type		
Protective Earth Test		Ω
Class I equipment, resistance from mains plug to accessible earthed parts, fixed power supply cord <0.2 Ω or detachable power supply cord <0.3 Ω		
Class I & II equipment, detachable cord measured separately, the maximum resistance for the protective earthing conductor is <0.2 Ω		
Class I equipment, resistance beteween any protectively earthed accessible metal parts and the protective earth terminal of the equipment is <0.1 Ω		
Insulation Resistance Tests		**MΩ**
Mains parts to protective earth & mains to equipment enclosure >10MΩ		
Earth Leakage Current Test		**uA**
Class I equipment, 5,000uA max, no fault condition		
Class I equipment, 10,000uA max, neutral open or mains reversed		
Touch Test Current (Enclosure Current)		**µA**
Class I single-phase and multi-phase equipment, no fault condition, 100uA		
Class I single-phase equipment with a flexible supply cord, neutral open or earth open, 500uA max		

Comments

Test Equipment Used:

Preventative Maintenance Equipment Report

Patient Bed

PATIENT BED
Annual PM Check Sheet

Asset Number			**Work Order No:**		
Service Date:		**Start Time:**		**Time (hrs)**	
Make		**Model:**		**Serial No:**	

Pre Start Checks				
1	Have you performed a work place hazard assessment?		If no, please explain	
2	Have you identified any work place hazards?		If yes, please report all hazards to your supervisor.	

Return the Bed to Service Functional Check List		
1	Check condition of castors.	
2	Check bed steering lock action.	
3	Check bed braking / locking action.	
4	Check all bed movements are as per the hand controller.	
5	Check the side rail condition, raise and locking actions.	
6	Check battery Voltage and record Check battery last changed date. (replace batteries if > 3 years and affix new sticker)	
7	Check serviceability of all link / pivot / hinge connections.	
8	Check for missing or loose fasteners.	
9	Inspect Power cord and connector	
10	Check CPR release function	
11	General Mechanical inspection	
12	Check lock out control	
13	Check condition and serviceability of both the bed head and footboards.	
14	Confirm the currency of the electrical safety tag. (retest if out of date)	
15	Confirm the currency of the planned maintenance due date. Raise Corrective	
16	Confirm the presence of the Safe Working Load (SWL) label.	
17	Confirm the presence of the 'Do not use Hill-Rom Mattress' label on non Hill Rom beds.	
18	Perform a push test for 15m, check for proper steerage and any abnormal rolling resistance.	
Do not put this bed back into service if any item records a 'fail'		

Electrical Safety checks Yes/NA			**Record Results**
1	Protective earth test (Earth resistance main plug earth connector to accessible earthed part <0.2 Ohm (AS3551) . Not applicable for class 2 insulated appliance		Ohms
2	Insulation resistance (Mains terminal to PE and to eqpt enclosure >10MOhm)		M Ohms
3	Earth leakage current test Class1 eqpt ,no fault condition <5000uA		uA
4	Neutral open or Main reversed <10000uA		uA
5	Touch current (Ensure there is no patient ton the bed), no fault condition <100uA		uA
6	Touch current with neutral open or earth open (Ensure there is no patient ton the bed) <500uA		uA
Do not put this bed back into service if any item records a 'fail'			

Preventative Maintenance Equipment Report

12 Lead ECG

12 Lead ECG
PERFORMANCE VERIFICATION REPORT
AS3551:2012

End User		**Department**	
Manufacturer		**Model**	
Aux ID		**Serial No**	

General (all tests to be done on battery)		Results
Condition of Equipment		
Keyboard Test		
LCD Test		
ECG Accuracy / Printer Functional and Image Quality (Tested @ 60 BPM)		
Confirm Time and Date Settings Correct		
Leads/s Off Warning and Artefact		
Perform 12 Lead Analysis (ensure line filter turned on)		
Battery and Charger Status		
Electrical Safety Test (AS3551)		
Equipment markings are legible		
Fuse ratings correct		
Equipment, Accessories Connectors, Plugs & Sockets undamaged and secured. Power cord approved type		
Protective Earth Test		Ω
Class I equipment, resistance from mains plug to accessible earthed parts, fixed power supply cord <0.2 Ω or detachable power supply cord <0.3 Ω		
Class I & II equipment, detachable cord measured separately, the maximum resistance for the protective earthing conductor is <0.2 Ω		
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Insulation Resistance Tests		MΩ
Mains parts to protective earth & mains to equipment enclosure >10MΩ		
Earth Leakage Current Test		uA
Class I equipment, 5,000uA max, no fault condition		
Class I equipment, 10,000uA max, neutral open or mains reversed		
Touch Test Current (Enclosure Current)		µA
Class I single-phase and multi-phase equipment, no fault condition, 100uA		
Class I single-phase equipment with a flexible supply cord, neutral open or earth open, 500uA max		
Applied Part Leakage Current		µA
CF equipment, 10uA max, normal condition		
CF equipment, 50uA max, earth open or neutral open		
Mains Contact Current		µA
CF equipment, 50uA max, per patient connection		

Comments

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